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<110> HOECH-GULDBERG, Ove
DOVE, Sophie

<120> PIGMENT PROTEIN FROM CORAL TISSUE

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<140> 09/890,463
<141> 2000-08-01

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<151> 2000-02-02

<150> PP8463
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<170> PatentIn version 3.1

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<213> Acropora aspera, Acropora horrida, Montipora caliculata, Porites murrayensis, Montipora monasteriata and Porites lobata

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Ser Val Ile Ala Lys
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Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
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Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr

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Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
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Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
        35                  40                  45

Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
    50                  55                  60

Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
65                  70                  75                  80

Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
                85                  90                  95

Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
            100                 105                 110

Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
        115                 120                 125

Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
    130                 135                 140

Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
145                 150                 155                 160

Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
                165                 170                 175

Lys Ala Arg Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
            180                 185                 190

Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
        195                 200                 205

Arg Glu Ile Ser Ile Ala Arg Lys Pro Leu Val Ala Cys Cys Phe Phe
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Arg Val Lys Ser Arg His Lys
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Val Asn Gly His Tyr Phe Glu Val Glu Gly Asp Gly Lys Gly Lys Pro
            20                  25                  30

Tyr Glu Gly Glu Gln Thr Val Arg Leu Ala Val Thr Lys Gly Gly Pro
        35                  40                  45

Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln Cys Gln Tyr Gly Ser
    50                  55                  60

Ile Pro Phe Thr Lys Tyr Pro Glu Asp Ile Pro Asp Tyr Val Lys Gln
65                  70                  75                  80

Ser Phe Pro Gly Arg Tyr Thr Trp Glu Arg Ile Met Asn Phe Glu Asp
                85                  90                  95

Gly Ala Val Cys Thr Val Ser Asn Asp Ser Ser Ile Gln Gly Asn Cys
            100                 105                 110

Phe Ile Tyr His Val Lys Phe Ser Gly Leu Asn Phe Pro Pro Asn Gly
        115                 120                 125

Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Asn Thr Glu Arg
    130                 135                 140

Leu Phe Ala Arg Asp Gly Met Leu Ile Gly Asn Asn Phe Met Ala Leu
145                 150                 155                 160

Lys Leu Glu Gly Gly Gly His Tyr Leu Cys Glu Phe Lys Ser Thr Tyr
                165                 170                 175

Lys Ala Lys Lys Pro Val Lys Met Pro Gly Tyr His Tyr Val Asp Arg
            180                 185                 190
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Lys Leu Asp Val Thr Asn His Asn Lys Asp Tyr Thr Ser Val Glu Gln
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Cys Glu Ile Ser Ile Ala Arg Lys Pro Val Val Ala Cys Arg Phe Phe
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Arg Val Lys Ser Arg His Lys Tyr Ala Val Ala
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cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag 240

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actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct 360

ggtttgaact ttcctcccaa tggacctgtt atgcagaaga agacacaggg ctgggaaccc 420

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tgctgttttt tcagagtcaa atcaaggcac aaataagcag tggcgtaaaa aacgtagatt 720

ctgattttag cttagagaag taggaacgaa gaagtgtaga caaccttcaa tgattaaact 780

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ctggctgtca ccaagggcgg acctctgcca tttgcttggg atattttatc accacagtgt 180

cagtacggaa gcataccatt caccaagtac cctgaagaca tccctgacta tgtaaagcag 240

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actgtcagca atgattccag catccaaggc aactgtttca tctaccatgt caagttctct 360

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<213> Acropora aspera, Montipora caliculata and Porites murrayensis

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Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
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Val Asn

<210> 8
<211> 25
<212> PRT
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Ser Val Ile Ala Lys Gln Met Thr Tyr Lys Val Tyr Met Ser Gly Thr
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Val Asn Asn His Tyr Glu Phe Val Thr
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Arg Met Glu Gly Thr Val Asn Gly His Glu Phe Glu Ile Glu Gly Glu
            20                  25                  30

Gly Glu Gly Arg Pro Tyr Glu Gly His Asn Thr Val Lys Leu Lys Val
        35                  40                  45

Thr Lys Gly Gly Pro Leu Pro Phe Ala Trp Asp Ile Leu Ser Pro Gln
    50                  55                  60

Phe Gln Tyr Gly Asn Lys Val Tyr Val Lys His Pro Ala Asp Ile Pro
65                  70                  75                  80

Asp Tyr Lys Lys Leu Ser Phe Pro Glu Gly Phe Lys Trp Glu Arg Trp
                85                  90                  95

Met Asn Phe Glu Asp Gly Gly Val Val Thr Val Thr Gln Asp Ser Ser
            100                 105                 110

Leu Gln Asp Gly Cys Phe Ile Tyr Lys Val Lys Phe Ile Gly Val Asn
        115                 120                 125

Phe Pro Ser Asp Gly Pro Val Met Gln Lys Lys Thr Met Gly Trp Glu
    130                 135                 140

Ala Ser Thr Lys Arg Leu Tyr Pro Arg Asp Gly Val Leu Lys Gly Glu
145                 150                 155                 160

Ile His Lys Ala Leu Lys Leu Lys Asp Gly Gly His Tyr Leu Val Glu
                165                 170                 175

Phe Lys Ser Ile Tyr Met Ala Lys Lys Pro Val Gln Leu Pro Gly Tyr
            180                 185                 190
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Tyr Tyr Val Asp Ser Lys Leu Asp Ile Thr Ser His Asn Glu Asp Tyr
        195                 200                 205

Thr Ile Val Glu Gln Tyr Glu Arg Thr Glu Gly Arg His His Leu Phe
    210                 215                 220

Leu
225
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<210> 10
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<213> Discosoma sp.

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Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
            20                  25                  30

Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
        35                  40                  45

Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
    50                  55                  60

Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
65                  70                  75                  80

His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
                85                  90                  95

Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
            100                 105                 110

Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
        115                 120                 125

Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
    130                 135                 140

Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
145                 150                 155                 160
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Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
165 170 175

Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
180 185 190

Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
195 200 205

Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
210 215 220

Thr Ala Ala Gly Ile Thr
225 230

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